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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.      | CONFIRMATION NO. |
|---|-------------|----------------------|--------------------------|------------------|
| 10/670,380  | 09/26/2003  | Sang-Hyuk Lee        | 041993-5240              | 6896             |
| 9629  | 7590        | 06/14/2005           | EXAMINER<br>DUONG, TAI V |                  |
| MORGAN LEWIS & BOCKIUS LLP<br>1111 PENNSYLVANIA AVENUE NW<br>WASHINGTON, DC 20004 |             |                      | ART UNIT<br>2871         | PAPER NUMBER     |

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

**Office Action Summary**

Application No.

10/670,380

Applicant(s)

LEE, SANG-HYUK

Examiner

Tai Duong

Art Unit

2871

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 April 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 4 and 8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-7 and 9-14 is/are rejected.
- 7) ☒ Claim(s) 15-18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09/26/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 09/26/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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Applicant's election with traverse of Species A (claims 2, 3, 6, 7, 12 and 15-18) and in the reply filed on 04/04/05 is acknowledged. The traversal is on the ground(s) that no undue burden would be placed upon the examiner if both Species A and Species B inventions were simultaneously examined. This is not found persuasive because the search and examination of the two species would cause a serious burden on the examiner, not taking into account that new claims with newly recited features of the two species might be added later in subsequent amendments. Examination includes consideration of the prior art, determination of the compliance of the specification and the drawings with respect to the rules, the compliance of the claims with respect to 35 USC 112, first and second paragraphs, etc..

The requirement is still deemed proper and is therefore made FINAL.

Claims 4 and 8 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 04/04/05.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Lee et al (Pub. No. 2002/0101547).

Note Figs. 33-34 and paragraphs 0148-0154 which identically the claimed method comprising the steps of forming a thin film transistor substrate 10 and a color filter substrate 11; forming a plurality of thin film transistors on the thin film transistor substrate; forming a color filter on the color filter substrate; attaching the thin film transistor substrate to the color filter substrate to form a liquid crystal display panel; injecting a liquid crystal into an opening of the liquid crystal display panel; and removing a shorting bar 102 formed at an outer periphery of a pad portion 101 of the liquid crystal display panel. It is noted that the feature "an in-plane switching mode" recited in the preamble has not been given patentable weight because it has been held that a preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 1-3, 5-7, 9, 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al in view of Tanaka et al'435 (US 6,853,435 is the English equivalent of WO 02/35283 published 05/02/02).

The only difference between Lee's method and that of the instant claims is the step of discharging at least one surface of the liquid crystal display panel using an ionizer system. Also, see paragraphs 0013, 0154 for the lighting test (visual display test), and paragraph 0108 for the alignment layer. Tanaka et al disclose that it was known to discharge at least one surface of the liquid crystal display panel using an ionizer system (col. 14, lines 18-24). Thus, it would have been obvious to a person of ordinary skill in the art in view of Tanaka et al to employ in Lee's method the step of discharging at least one surface of the liquid crystal display panel using an ionizer system for preventing electrostatic discharge damage to the TFT substrate. Also, it is well-known in the art to form the alignment layer includes applying a thin film of polymer and performing a rubbing process, as evidenced by Tanaka et al (col. 22, line 63 – col. 23, line 36).

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al and Tanaka et al as applied to claim 9 above, and further in view of the M. Ohta et al article cited by Applicant.

The only difference between the method cited in the above rejection of claim 9 and that of the instant claim is the thin film transistor substrate including a thin film transistor, a pixel electrode and a common electrode (in-plane switching mode). The M. Ohta et al article discloses that it was known to employ the thin film transistor substrate including a thin film transistor, a pixel electrode and a

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common electrode. Thus, it would have been obvious to a person of ordinary skill in the art in view of M. Ohta et al to employ in the method cited in the above rejection of claim 9 the thin film transistor substrate including a thin film transistor, a pixel electrode and a common electrode for fabricating a wide-viewing angle LCD.

Claims 15-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 15 is allowed over the prior art because none of the prior art discloses or suggests a method as recited in claim 13 *in combination* with the steps of disposing serially a cleaning unit and a lighting test unit; and providing a discharging device at each of the cleaning unit and the lighting test unit for removing an electrostatic charge from a back surface of the thin film transistor substrate. Claim 17 is also allowed because none of the prior art discloses or suggests a method as recited in claim 13 *in combination* with the step of supplying continuously positive ions and negative ions in equal amounts through a plurality of probes to the thin film transistor substrate. Claims 16 and 18 are also allowed since they depend on the allowed claims 15 and 17.

Any inquiry concerning this communication should be directed to Tai Duong at telephone number (571) 272-2291.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

  
ROBERT H. KIM  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800

TVD  
06/05